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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,124	03/29/2004	Ashutosh Dutta	APP 1530	2187

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TELCORDIA TECHNOLOGIES, INC.
ONE TELCORDIA DRIVE 5G116
PISCATAWAY, NJ 08854-4157

EXAMINER	
ZHU, BO HUI ALVIN	
ART UNIT	**PAPER NUMBER**
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/812,124	DUTTA ET AL.	
	Examiner	Art Unit	
	Bo Hui A. Zhu	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 5 – 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rezaiifar (US 2004/0085931) in view of Dennison et al. (US 6,847,822).

(1) with regard to claim 1:

Rezaiifar discloses a system and method, comprising: a first information gateway (14 on Fig. 1A) located within a first mobile coverage area (coverage area of 14, 6 and 8 on Fig. 1A) said first information gateway including first storage means for storing a list of available IP addresses in said first mobile coverage area (each PDSN contains a pool of addresses that are assigned to it; paragraphs [0026] and [0031]); a second information gateway (16 on Fig. 1A) located within a second mobile coverage area (the coverage area of 16, 10 on Fig 1A), said second mobile coverage area abutting said first mobile coverage area, said second information gateway including second storage means for storing a list of available IP addresses in said second mobile coverage area (like every other PDSN, PDSN 16 contains a pool of addresses that are assigned to it to be used only in its coverage area); a first communication means for said first information gateway and said second information gateway to communicate (IP network 18 on Fig. 1A); a mobile user unit (2 on Fig. 1A); and a second communication means

for said mobile user unit to communicate with said first information gateway or said second information gateway (mobile station 2 can communicate with PDSN 14 and PDSN 16, when it moves from one coverage area to another).

Rezaiifar does not disclose the mobile user unit having GPS means to identify the geographic location of said mobile user unit.

Dennison et al. teaches a GPS means for identifying the geographic location of a mobile unit (24 on Fig. 7). It would have been desirable to have a GPS means on a mobile unit because it would allow the network service provider to have a better knowledge of the exact location of a service user, which allows them to be able to manage their network to be more efficient and also be able to provide extra services to the users. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a GPS means as taught by Dennison et al. in the system of Rezaiifar.

(2) with regard to claim 5:

Rezaiifar further discloses the first and second storage means consist of a database (a poor of address is viewed as a database).

(3) with regard to claims 6 and 7:

Rezaiifar further discloses the first and second mobile coverage areas are WLAN network, LAN network, IPv4 network or IPv6 network (because 14 and 16 are part of an IP network, inherently they have to be either IPv4 or IPv6 networks)

3. Claims 2 – 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rezaiifar (US 2004/0085931) in view of Dennison et al. (US 6,847,822) and further in view of Johnson et al. (US 6,625,135).

(1) with regard to claims 2 - 4:

Rezaiifar does not disclose having an address conflict resolution means associated with each of said first information gateway and said second information gateway, wherein said address conflict resolution means comprises an ARP mechanism, wherein said ARP mechanism is selected from the group consisting of proxy ARP, inverse ARP, reverse ARP and DHCP ARP.

Johnson et al. teaches using proxy ARP (column 4, line 66 – column 5, line 10). It would have been obvious to one of ordinary skill in the art at the time of the invention to use proxy ARP because it would make allow users on different networks to be able to communicate with one another without having to know each other's physical address, which would simplify the design of the network and make the network more efficient. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a proxy ARP in the system of Rezaiifar

4. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rezaiifar (US 2004/0085931) in view of Dommety et al. ("Fast Handovers for Mobile IPv6", pages 9 - 14) and further in view of Dennison et al. (US 6,847,822).

(1) with regard to claim 8:

Rezaiifar discloses a system and method, comprising: a first information gateway (14 on Fig. 1A) located within a first mobile coverage area (coverage area of 14, 6 and 8

on Fig. 1A) said first information gateway including first storage means for storing a list of available IP addresses in said first mobile coverage area (each PDSN contains a pool of addresses that are assigned to it; paragraphs [0026] and [0031]); a second information gateway (16 on Fig. 1A) located within a second mobile coverage area (the coverage area of 16, 10 on Fig 1A), said second mobile coverage area abutting said first mobile coverage area, said second information gateway including second storage means for storing a list of available IP addresses in said second mobile coverage area (like every other PDSN, PDSN 16 contains a pool of addresses that are assigned to it to be used only in its coverage area); a first communication means for said first information gateway and said second information gateway to communicate (IP network 18 on Fig. 1A); a mobile user unit (2 on Fig. 1A); and a second communication means for said mobile user unit to communicate with said first information gateway or said second information gateway (mobile station 2 can communicate with PDSN 14 and PDSN 16, when it moves from one coverage area to another).

Rezaiifar does not disclose the mobile user unit having GPS means to identify the geographic location of said mobile user unit; and prior to said first mobile user unit moving out of said first mobile coverage area into said second mobile coverage area, establishing communication between said first information gateway and said second information gateway via said first communication means; sending at least one available IP address stored in said second storage means of the said second information gateway to said first information gateway; and sending said available IP address to said

mobile user unit; and configuring said mobile user unit to user said available IP address upon entering said second mobile coverage area.

Dommety et al. teaches the limitation of prior to said first mobile user unit moving out of said first mobile coverage area into said second mobile coverage area; establishing communication between said first information gateway and said second information gateway via said first communication means; sending at least one available IP address stored in said second storage means of the said second information gateway to said first information gateway; and sending said available IP address to said mobile user unit; and configuring said mobile user unit to user said available IP address upon entering said second mobile coverage area (page 12, 3rd, 4th and 5th paragraphs, "In order to obtain a new CoA ... just forward them as normal to the mobile node"). It would have been desirable to have the features as taught by Dommetry et al. because it would improve the efficiency of the handover process. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the features as taught by Dommety et al. in the system of Rezaiifar.

Dennison et al. teaches a GPS means for identifying the geographic location of a mobile unit (24 on Fig. 7). It would have been desirable to have a GPS means on a mobile unit because it would allow the network service provider to have a better knowledge of the physical location of a service user, which would result in better network resource management and also the ability to provide extra services to the users. Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to include a GPS means as taught by Dennison et al. in the system of Rezaiifar.

(2) with regard to claim 9:

Rezaiifar does not disclose dynamically updating said list of available IP addresses on said first and second storage means.

Dommety et al. teaches dynamically updating addresses on a storage means (page 14, section 3.1.3, 2nd paragraph, "If the new care-of-address is legal and acceptable to the new access router it adds it to the neighboring Cache..."). It would have been desirable to dynamically update the addresses stored because it would make the system more efficient by preventing connection failure, packet loss or other deficiencies from occurring due to changes in the network thus ensure the proper operation of the devices in the network.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rezaiifar (US 2004/0085931) in view of Dommety et al. ("Fast Handovers for Mobile IPv6", pages 9 - 14) and Dennison et al. (US 6,847,822) and further in view of Budka et al. (US 7,224,983).

(1) with regard to claim 10:

Rezaiifar does not disclose establishing communication between said mobile user unit and said first information is performed upon boot up of said mobile user unit.

Budka et al. teaches a mobile device connecting to a base station when they first power on (column 1, line 20 – 25). This feature would have been desirable because it would shorten the time it takes for the mobile device to access to the network thus make

the system more efficient. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the feature as taught by Budka et al. in the system of Rezaiifar.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rezaiifar (US 2004/0085931) in view of Dommety et al. ("Fast Handovers for Mobile IPv6", pages 9 - 14).

(1) with regard to claim 11:

Rezaiifar discloses a system and method, comprising: an information gateway (14 on Fig. 1A) located within a first mobile coverage area (coverage area of 14, 6 and 8 on Fig. 1A) said information gateway including first storage means for storing a list of available IP addresses in said first mobile coverage area (each PDSN contains a pool of addresses that are assigned to it to be used only in its coverage area).

Rezaiifar does not disclose dynamically updating said list of available IP addresses.

Dommety et al. teaches dynamically updating addresses (page 14, section 3.1.3, 2nd paragraph, "If the new care-of-address is legal and acceptable to the new access router it adds it to the neighboring Cache..."). It would have been desirable to dynamically update the addresses stored because it would make the system more efficient by preventing connection failure, packet loss or other deficiencies from occurring due to changes in the network thus ensure the proper operation of the devices in the network.

7. Claims 12 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rezaiifar (US 2004/0085931) in view of Dommety et al. ("Fast Handovers for Mobile IPv6", pages 9 - 14) and further in view of Johnson et al. (US 6,625,135).

(1) with regard to claims 12 - 14:

Rezaiifar does not disclose having an address conflict resolution means associated with each of said first information gateway and said second information gateway, wherein said address conflict resolution means comprises an ARP mechanism, wherein said ARP mechanism is selected from the group consisting of proxy ARP, inverse ARP, reverse ARP and DHCP ARP.

Johnson et al. teaches using proxy ARP (column 4, line 66 – column 5, line 10). It would have been obvious to one of ordinary skill in the art at the time of the invention to use proxy ARP because it would make allow users on different networks to be able to communicate with one another without having to know each other's physical address, which would simplify the design of the network and make the network more efficient. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a proxy ARP in the system of Rezaiifar.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bo Hui A. Zhu whose telephone number is (571)270-1086. The examiner can normally be reached on Mon-Thur 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BZ.
August 28, 2007

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600